

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-17 (canceled)

18 (New) A manufacturing method for an SOI wafer, comprising:

bonding an active layer wafer with a supporting wafer via an insulating film to form a bonded wafer body;

reducing a film thickness in a part of the active layer wafer that forms a part of the bonded wafer body to form an SOI layer for manufacturing the SOI wafer, wherein

the supporting wafer has a nitrogen concentration in a range of 1×10^{14} atoms/cm³ to 3×10^{15} atoms/cm³ and an oxygen concentration of equal to or higher than 12×10^{17} atoms/cm³ when measured in accordance with old ASTM so as to have an oxidation induced stacking fault substantially entirely across a surface thereof.

19. (New) A manufacturing method for an SOI wafer, comprising:

bonding an active layer wafer with a supporting wafer via an insulating film to form a bonded wafer body; and

reducing a film thickness in a part of the active layer wafer that forms a part of the bonded wafer body to form an SOI layer for manufacturing the SOI wafer, wherein

the supporting wafer has an oxygen concentration of equal to or higher than 16×10^{17} atoms/cm³ when measured in accordance with old ASTM.

20. (New) The manufacturing method of an SOI wafer in accordance with claim 18, further comprising:

ion-implanting one of hydrogen gas and a noble gas element to the active layer wafer to form an ion-implanted layer in the active layer wafer, prior to said bonding; and
heat treating the bonded wafer body to induce cleavage in the bonded wafer body at the site of the ion-implanted layer as an interface so as to form the SOI layer with a remaining active layer.

21. (New) The manufacturing method of an SOI wafer in accordance with claim 19, further comprising:

ion-implanting one of a hydrogen gas and a noble gas element to the active layer wafer to form an ion-implanted layer in the active layer wafer, prior to said bonding; and
heat treating the bonded wafer body to induce cleavage in the bonded wafer at the site of the ion-implanted layer as an interface so as to form the SOI layer with a remaining active layer.

22. (New) The manufacturing method of an SOI wafer in accordance with claim 18, wherein a thickness of the SOI layer is thinner than 0.10 μ m.

23. (New) The manufacturing method of an SOI wafer in accordance with claim 19, in which a thickness of the SOI layer is thinner than 0.10 μ m.

24. (New) The manufacturing method of an SOI wafer in accordance with claim 20, wherein a thickness of the SOI layer is thinner than 0.10 μ m.

25. (New) The manufacturing method of an SOI wafer in accordance with claim 21, wherein a thickness of the SOI layer is thinner than 0.10 μ m.

26. (New) The manufacturing method of an SOI wafer in accordance with claim 18 further comprising one of:

applying a rapid thermal process at a temperature in a range of 1100 °C to 1250 °C for five minutes or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding; and

applying a high-temperature heat treatment at a temperature in a range of 1050 °C to 1250 °C for one hour or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding.

27. (New) The manufacturing method of an SOI wafer in accordance with claim 19 further comprising one of:

applying a rapid thermal process at a temperature in a range of 1100 °C to 1250 °C for five minutes or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding; and

applying a high-temperature heat treatment at a temperature in a range of 1050 °C to 1250 °C for one hour or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding.

28. (New) The manufacturing method of an SOI wafer in accordance with claim 20 further comprising one of:

applying a rapid thermal process at a temperature in a range of 1100 °C to 1250 °C for five minutes or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding; and

applying a high-temperature heat treatment at a temperature in a range of 1050 °C to 1250 °C for one hour or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding.

29. (New) The manufacturing method of an SOI wafer in accordance with claim 21 further comprising one of:

applying a rapid thermal process at a temperature in a range of 1100 °C to 1250 °C for five minutes or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding; and

applying a high-temperature heat treatment at a temperature in a range of 1050 °C to 1250 °C for one hour or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding.

30. (New) The manufacturing method of an SOI wafer in accordance with claim 22 further comprising one of:

applying a rapid thermal process at a temperature in a range of 1100 °C to 1250 °C for five minutes or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding; and

applying a high-temperature heat treatment at a temperature in a range of 1050 °C to 1250 °C for one hour or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding.

31. (New) The manufacturing method of an SOI wafer in accordance with claim 23 further comprising one of:

applying a rapid thermal process at a temperature in a range of 1100 °C to 1250 °C for five minutes or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding; and

applying a high-temperature heat treatment at a temperature in a range of 1050 °C to 1250 °C for one hour or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding.

32. (New) The manufacturing method of an SOI wafer in accordance with claim 24 further comprising one of:

applying a rapid thermal process at a temperature in a range of 1100 °C to 1250 °C for five minutes or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding; and

applying a high-temperature heat treatment at a temperature in a range of 1050 °C to 1250 °C for one hour or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding.

33. (New) The manufacturing method of an SOI wafer in accordance with claim 25 further comprising one of:

applying a rapid thermal process at a temperature in a range of 1100 °C to 1250 °C for five minutes or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding; and

applying a high-temperature heat treatment at a temperature in a range of 1050 °C to 1250 °C for one hour or longer to the supporting wafer in a reducing gas atmosphere, prior to said bonding.

34. (New) An SOI wafer manufactured by the following method:

bonding an active layer wafer with a supporting wafer via an insulating film to form a bonded wafer body;

reducing a film thickness in a part of the active layer wafer that forms a part of the bonded wafer body to form an SOI layer for manufacturing the SOI wafer, wherein

the supporting wafer has a nitrogen concentration in a range of 1×10^{14} atoms/cm³ to 3×10^{15} atoms/cm³ and an oxygen concentration of equal to or higher than 12×10^{17} atoms/cm³ when measured in accordance with old ASTM so as to have an oxidation induced stacking fault entirely across a surface thereof; and a thickness of the SOI layer is thinner than 0.10 μm.

35. (New) An SOI wafer manufactured by the following method:

bonding an active layer wafer with a supporting wafer via an insulating film to form a bonded wafer body; and

reducing a film thickness in a part of the active layer wafer that forms a part of the bonded wafer body to form an SOI layer for manufacturing the SOI wafer, wherein

the supporting wafer has an oxygen concentration of equal to or higher than 16×10^{17} atoms/cm³ when measured in accordance with old ASTM; and a thickness of the SOI layer is thinner than 0.10 μ m.